IN THE SPECIFICATION:

Please amend the specification as follows to make corresponding changes to the specification and take into account that Figures 1 and 2 have been divide and renumbered as Figs. 1A, 1B and Fig. 2, and Figs. 3A, 3B and 3C.

[0015] ~~FIG. 1 shows~~ Figures 1A-1B show an arrangement according to the present invention for detecting movement of a piston by a movement monitor unit.

[0016] ~~FIG. 2 is a functional diagram~~ FIGURES 2-3C provide functional diagrams of the arrangement according to the present invention.

[0017] A central lubrication system according to the present invention comprises a lubricant vessel, a pump unit, a control unit, pipe systems and a feeder provided with at least one piston 5. ~~FIG. 1 shows~~ FIGS. 1A-1B show a preferred embodiment of the present invention which shows a movement monitor unit connected to the feeder, the movement monitor unit comprising a junction part 4 and an electronics part 13. The junction part, i.e. a nipple 4, further comprises a sensor part 3 which, in turn, comprises a permanent magnet 2 and a sensor 1 which in the present embodiment is a Hall sensor, preferably an analogue Hall sensor, but it may also be a sensor of another type which is suitable for the present invention. The movement monitor unit is arranged in connection with the feeder as indicated in ~~FIG. 1~~ FIGS. 1A-1B while the nipple 4 is arranged in its operation area in the vicinity of a travel groove of the feeder piston 5 of the lubricant feeder, outside the pressurized space of the feeder, however. A wall, usually made of metal, is thus provided between the piston 5 and the sensor part 3. The piston 5 is manufactured from a magnetizable material whereas the nipple 4 is manufactured from a weakly magnetizable or a non-magnetizable material. In FIGS. 1A-1B ~~FIG. 1~~, the sensor 1 is mounted to the nip 4 as close to the piston 5 as possible, and the permanent magnet 2 is mounted at a suitable distance on the back. The central lubrication system often includes a plurality of the above-described feeders, each being provided with a movement monitor unit of its own. In addition of the aforementioned parts, the system may comprise a pressure monitor unit for monitoring pressure in the system; the pressure monitor unit may be a pressure switch or a pressure transmitter.

[0018] The nipple 4 and thus also the sensor part 3 are mounted such that movement of the piston 5, which is made of a magnetizable material and which moves due to the influence of the pressure of a lubricant present in the pipe system and the object to be lubricated, causes a change in the magnetic field generated by the permanent magnet upon approaching the sensor part 3. The sensor 1 is responsible for detecting this change in the magnetic field and for transferring the signal obtained about the change to the electronics part 13 of the pressure monitor unit. The signal shown in FIG. 2A is ~~Signal A~~ transmitted to the electronics part by the sensor 1 is shown in FIG. 2. Preferably, in the solution according to FIG. 2, the piston makes a back-and-forth movement, requiring a sufficient pressure difference in order to move. The body of the feeder may be made of a magnetizable or a non-magnetizable material.

[0019] In accordance with FIG. 2, the electronics part 13 comprises a voltage regulator 6, a detector 7 for detecting polarity of voltage, a minicontroller 8, an output circuit 9, indicator LEDs 10 as well as an amplifier part comprising a differential amplifier circuit 11 and a low-pass filter 12. From the sensor 1, the signal travels to the differential amplifier circuit 11 of the electronics part 13 and therefrom further to the low-pass filter 12 whose output is an average of the signal obtained from the sensor. The output obtained from the differential amplifier 11 is thus an amplified difference of the signal and its average, shown in FIG. 3B ~~2 and designated by the letter B~~.

[0020] Next, the signal travels to the microcontroller 8, which converts the signal received from the amplifier 11 into a digital form. A final decision about an output signal of the electronics part is made on the basis of a signal level and duration. The output circuit 9 is a potential-free relay contact which gives the signal outputted from the electronics part 13 an output in accordance with a selected operation mode. This pulse-shaped output signal is shown in FIG. 3C ~~designated by the letter C in FIG. 2~~. According to the present invention, the operation mode may be a pulse-shaped one or a locking one.